

**WHAT IS CLAIMED IS:**

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1. A speaker system, comprising :  
2 at least one transducer;  
3 at least one speaker analog circuit; and  
4 a diagnostics circuit coupled to the at least one transducer and the at least one  
5 speaker analog circuit.

1 2. The speaker system recited in Claim 1, wherein the diagnostics circuit  
2 further comprises a power diagnostics circuit.

1 3. The speaker system recited in Claim 2, wherein the power diagnostics  
2 circuit further comprises:  
3 a rectifier; and  
4 at least one AC power test indicator coupled to the rectifier.

1 4. The speaker system recited in Claim 2, wherein the power diagnostics  
2 circuit further comprises:  
3 an AC-to-DC conversion circuit; and  
4 at least one DC power test indicator coupled to the AC-to-DC conversion  
5 circuit.

1 5. The speaker system recited in Claim 1, wherein the diagnostics circuit  
2 further comprises an analog diagnostics circuit.

1 6. The speaker system recited in Claim 5, wherein the analog diagnostics  
2 circuit further comprises:  
3 a diagnostic mode activation mechanism; and  
4 a diagnostic signal generation circuit coupled to the diagnostic mode  
5 activation mechanism and coupled to the at least one speaker analog  
6 circuit.

1 7. The speaker system recited in Claim 6, wherein the analog diagnostics  
2 circuit further comprises;

3 an analog activity sensor that is coupled to the output of each speaker analog  
4 circuit and that generates a corresponding status indicator for each  
5 speaker analog circuit; and

6 at least one analog test indicator, wherein each of the at least one analog test  
7 indicator is coupled to the analog activity sensor, each analog test  
8 indicator receiving at least one of the status indicators.

9 8. The speaker system recited in Claim 7, wherein the analog activity  
2 sensor further comprises at least one transistor.

1 9. A speaker system recited in Claim 7, wherein the analog activity sensor  
2 further comprises at least one comparator.

1 10. A speaker system recited in Claim 6, wherein each at least one  
2 transducer is coupled to the diagnostic signal generation circuit.

1 11. A speaker system recited in Claim 10, wherein:  
2 the diagnostic signal generation circuit generates at least one test signal;  
3 each speaker analog circuit receives at least one of the at least one test signal;  
4 and  
5 each transducer receives at least one of the at least one test signal.

1 12. A computer system comprising:  
2 a processor;  
3 a memory coupled to the processor; and  
4 a speaker system coupled to the processor, wherein the speaker system  
5 includes a diagnostics circuit.

1           13.    The computer system recited in Claim 12, wherein the speaker system  
2 further comprises:  
3           at least one transducer; and  
4           at least one speaker analog circuit, wherein the diagnostics circuit is coupled to  
5           the at least one transducer and the at least one speaker analog circuit.

1           14.    The computer system recited in Claim 12, wherein the diagnostics  
2 circuit further comprises a power diagnostics circuit.

1           15.    The computer system recited in Claim 14, wherein the power  
2 diagnostics circuit further comprises:  
3           a rectifier; and  
4           at least one AC power test indicator coupled to the rectifier.

1           16.    The computer system recited in Claim 14, wherein the power  
2 diagnostics circuit further comprises:  
3           an AC-to-DC conversion circuit; and  
4           at least one DC power test indicator coupled to the AC-to-DC conversion  
5           circuit.

1           17.    The computer system recited in Claim 12, wherein the diagnostics  
2 circuit further comprises an analog diagnostics circuit.

1           18.    The computer system recited in Claim 17, wherein the analog  
2 diagnostics circuit further comprises:  
3           a diagnostic mode activation mechanism; and  
4           a diagnostic signal generation circuit coupled to the diagnostic mode  
5           activation mechanism and coupled to the at least one speaker analog  
6           circuit.

19. The computer system recited in Claim 18, wherein the analog  
diagnostics circuit further comprises:  
an analog activity sensor that is coupled to the output of each speaker analog  
circuit and that generates a corresponding status indicator for each  
speaker analog circuit; and  
at least one analog test indicator, wherein each of the at least one analog test  
indicator is coupled to the analog activity sensor, each analog test  
indicator receiving at least one of the status indicators.

20. The computer system recited in Claim 19, wherein the analog activity  
sensor further comprises at least one transistor.

21. The computer system recited in Claim 19, wherein the analog activity  
sensor further comprises at least one comparator.

22. The computer system recited in Claim 18, wherein each at least one  
transducer is coupled to the diagnostic signal generation circuit.

23. The computer system recited in Claim 22, wherein:  
the diagnostic signal generation circuit generates at least one test signal;  
each speaker analog circuit receives at least one of the at least one test signal;  
and  
each transducer receives at least one of the at least one test signal.